Name _____ Class # ____ Date _____

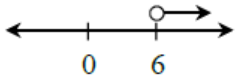
GRAPHING AND SOLVING INEQUALITIES 6.1.3 – 6.1.4

GRAPHING INEQUALITIES

The solutions to an equation can be represented as a point (or points) on the number line. If the expression comparison mat has a range of solutions, the solution is expressed as an inequality represented by a ray or segment with solid or open endpoints. Solid endpoints indicate that the endpoint is included in the solution (≤ or ≥), while the open dot indicates that it is not part of the solution (< or >).

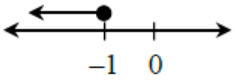
Example 1

$x > 6$



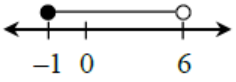
Example 2

$x \leq -1$



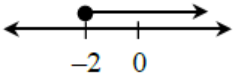
Example 3

$-1 \leq y < 6$



Example 4

$y \geq -2$



Make a separate number line for EACH expression. Be sure to use a ruler.

Problems

Graph each inequality on a number line.

1. $m < 2$
2. $x \leq -1$
3. $y \geq 3$
4. $-1 \leq x \leq 3$
5. $-6 < x < -2$
6. $-1 < x \leq 2$
7. $m > -9$
8. $x \neq 1$
9. $x \leq 3$